



WORKPLACE SAFETY AND HEALTH IN CONNECTICUT

*From The
National Institute for Occupational Safety and Health*



State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Connecticut.

The Burden of Occupational Illness and Injury in Connecticut

- In Connecticut, there are approximately 1.7 million individuals employed in the workforce.¹
- In 2000, 55 workers died as a result of workplace injuries.²
- The construction industry had the highest number of fatalities, followed by the transportation and public utilities industry and the agriculture, forestry and fishing industry.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 2.3 deaths per 100,000 workers—below the national average rate of 4.5 deaths per 100,000 workers.²
- In 2000, there were 101,600 nonfatal workplace injuries and illnesses in Connecticut.³

The Cost of Occupational Injury and Illness in Connecticut

In 2000, the most recent year for which data are available, a total of \$667 million was paid for workers' compensation claims by Connecticut private insurers and self-insured employers.⁴ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Connecticut

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 27 requests for HHEs in Connecticut in a variety of industrial settings, including the following example:

Groton, Connecticut: Occupational Asthma

In 1996, NIOSH responded to a request from the Metal Trades Council of New London County on behalf of employees at a Groton shipyard to evaluate health problems attributed to interior painting during construction of submarines. Employees reported that using epoxy paint caused them headaches, breathing difficulties, skin irritation, rashes, chest pain, shortness of breath, and asthma. Additional information on 13 employees who were diagnosed with occupational asthma and whose physicians had notified the state surveillance system was provided by the Connecticut State Division of Environmental Epidemiology and Occupational Health. NIOSH investigators concluded that exposure to welding fume and possibly to components of epoxy resin paint may have contributed to employees' bronchial hyper-responsiveness and occupational asthma. Recommendations included improving ventilation, ensuring proper use of personal protective equipment, improving the scheduling of duties to reduce exposures, and following existing safety and health guidelines.

Fatality Assessment and Control Evaluation (FACE) Investigations

NIOSH developed the FACE program to identify work situations with a high risk of fatality and to formulate and disseminate prevention strategies. Since 1995, two FACE investigations have been conducted in Connecticut, including the following example:

Work-Related Vehicular Fatality

On March 13, 2000, a 16-year-old male mechanic's assistant died after he was run over by a trailer-mounted tub grinder, a machine that grinds large volumes of wood. The victim was a high school student working part time at a company where wood waste was processed and vehicles were maintained. On the day of the incident, a mechanic was making repairs under the tub grinder that had been connected to a truck/tractor. When the mechanic went to obtain a wrench, the victim crawled under the tub grinder with his own wrench. The truck/tractor driver, seeing the mechanic leave, drove the vehicle forward, running over the victim. NIOSH investigators concluded that employers should: develop, implement, and enforce standard operating procedures for repair work performed under vehicles; train workers to recognize unsafe conditions; and comply with laws prohibiting youths less than 18 years of age to work in particularly hazardous occupations.

Fire Fighter Fatality Investigation and Prevention Program

The purpose of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to determine factors that cause or contribute to fire fighter deaths suffered in the line of duty. NIOSH uses data from these investigations to generate fatality investigation reports and a database of case results that guides the development of prevention and intervention activities. Since 1997, there have been two fire fighter fatality investigations in Connecticut.

Building State Capacity

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Connecticut Department of Public Health. Through ABLES, Public Health Department staff track and respond to cases of excessive lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility.

Extramural Programs Funded by NIOSH

The following are examples of recent research grants, training grants, or cooperative agreements funded by NIOSH in the state of Connecticut.

University of Connecticut

This program supports occupational medicine residency training at the University of Connecticut Health Center. In fiscal year 2001, six students were enrolled in the program.

Yale University

This program supports occupational medicine residency training at the Yale University School of Medicine. In fiscal year 2001, five residents were enrolled and one resident was graduated. In addition, five continuing education programs were held for 50 practicing professionals.

Study of Isocyanate Asthma in Autobody Shops

Most of the reported cases of occupational asthma are attributable to isocyanates, contained in foams, fibers, coatings such as paints and varnishes, and elastomers that are used in the automobile industry, autobody repair, and building insulation materials. Prevention opportunities are limited by inadequate knowledge of isocyanate exposure patterns, the factors causing and exacerbating isocyanate asthma, and a simple way to diagnose the disease or identify specific at-risk groups. NIOSH supports an epidemiologic study of exposed auto body shop spray painters and co-workers conducted by Yale University that aims to provide the practical knowledge needed to diagnose and prevent this important occupational disease.

Exposure-Response Relationship in Hand-Arm Vibration

Exposure to vibrating tools produces several characteristic disorders affecting tissues of the upper extremity, which collectively are termed the Hand-Arm Vibration Syndrome (HAVS). To better understand HAVS, NIOSH and the University of Connecticut will conduct biomechanical assessment of four cohorts of vibration-exposed workers from Canada, Finland, Sweden, and the United States.

Health and Socioeconomic Consequences of Nonspecific Building-Related Illness (NSBRI)

More than half of the U. S. workforce is employed in indoor nonindustrial environments in which NSBRI (or sick building syndrome) has increasingly been reported. NSBRI, usually associated with a particular building, is an important cause of disability and lost work time. With support from NIOSH, researchers at Yale University will identify diagnostic criteria, risk factors associated with worst outcomes, and the socioeconomic consequences of NSBRI.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

⁴National Academy of Social Insurance, Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates, May 2002.